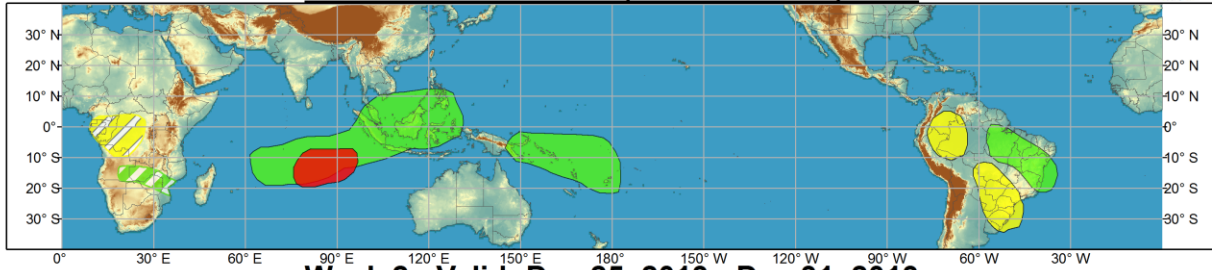




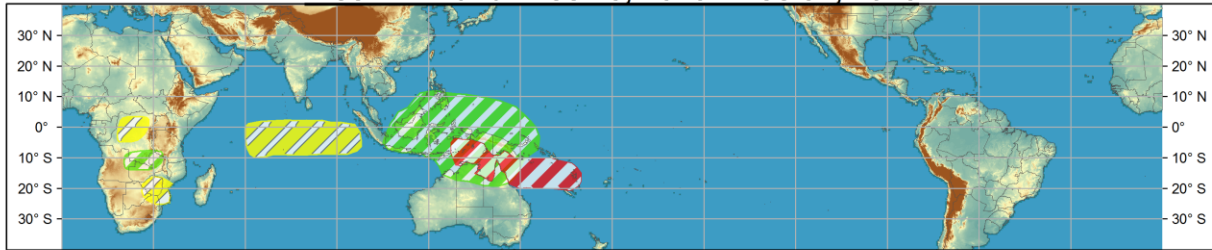
Global Tropics Hazards and Benefits Outlook - Climate Prediction Center



Week 1 - Valid: Dec 18, 2013 - Dec 24, 2013



Week 2 - Valid: Dec 25, 2013 - Dec 31, 2013



Produced: 12/17/2013

Forecaster: Gottschalck

	Confidence	
	High	Moderate
Tropical Cyclone Formation		
Above-average rainfall		
Below-average rainfall		
Above-normal temperatures		
Below-normal temperatures		

Development of a tropical cyclone that eventually reaches tropical storm/cyclone strength.

Weekly total rainfall in the upper third of the historical range.

Weekly total rainfall in the lower third of the historical range.

7-day mean temperatures in the upper third of the historical range.

7-day mean temperatures in the lower third of the historical range.

Product is updated once per week. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



The MJO remained weak over the past seven days, although some indicators did show slightly better organization primarily in the RMM index. Velocity potential and OLR diagnostics continue to indicate persistent enhanced (suppressed) convection across the Indian Ocean (western Pacific) during the past week. Atmospheric Kelvin wave (KW) activity has been strong during November and early December and eastward propagation of these waves is quite apparent. One KW is crossing the Maritime continent and entering the western Pacific and is in part responsible for some eastward movement of the RMM index during the past week.

The main large areas of enhanced convection observed over the past week were located across the equatorial Indian Ocean, the western Maritime continent and parts of east Brazil, west of Hawaii and southern Africa. Tropical cyclone Amara developed in the southern Indian Ocean and a second system is likely to develop within the next couple of days as of outlook release time. Anomalously dry conditions were observed across northern Australia, much of the western Pacific, parts of northeast South America.

Model forecasts of the RMM index indicate some eastward shift of an MJO signal during Week-1 to the Maritime continent before weakening abruptly. The short-term eastward shift and rapid weakening is consistent with the evolution of the KW across the Indo-Pacific warm pool region during the period. It is unclear whether this activity will initiate a more coherent, robust MJO evolution. At this time the MJO is forecast to remain generally but there is high uncertainty for its evolution moving into the Week-2 period.

The outlook for Week-1 favors above-median precipitation for the central Indian Ocean primarily south of the equator eastward to include much of the western Maritime continent and parts of the Philippines. The primary driver for this area is residual tropical cyclone activity, weak MJO signal and support from the GFS and CFS model guidance. An area of enhanced rainfall is also indicated across parts of the southwest Pacific associated with KW activity and its associated response, also consistent with model guidance. Early in the period, a second tropical cyclone is likely to develop southwest of Sumatra in the eastern Indian Ocean. Persistent and enhanced frontal activity favors wetter-than-average conditions for areas of eastern Brazil with suppressed rainfall favored across areas in northwest South America and southern Brazil.

Confidence is low during Week-2. We favor enhanced rainfall centered across the Maritime continent and northern Australia associated with the continuation of a weak MJO signal, potential development of a monsoon trough and more active monsoon into Australia. Considerably drier air and suppressed convection is apt to move into the Indian Ocean during Week-2 consistent with any eastward movement of a weak MJO signal and enhanced Australian monsoon. This is consistent with the CFS model guidance as well.

Favored above- and below-median rainfall areas across Africa for both Week-1 and Week-2 are primarily based on more regional scale features and consistent with outlooks from the CPC African Desk.